

We run a small wireless ISP using 2400 MHz equipment. Most of our coverage is over areas that have no other form of broadband Internet service and the dialup services available are often slow. We also provide access to the local government agencies as well as plans to offer service for the local EMS. Our projections are 400 to 500 residential and business customers within the next 18 months.

The problems we see are:

#### Client Equipment:

The list of certified systems for client equipment is a very short and expensive list and the solutions offered are not always the best choice. I fully agree with certifying any system that includes an amplifier but if the system certification requirement was dropped on unamplified systems, it would enable us to better engineer our own network and provide our customers a better and cheaper solution that still operated within regulations. Amplifiers just increase the noise floor and a properly designed system should not require them. If the radio's we use are certified, we should be allowed to mix and match antennas from any vendor to develop a solution that fits our need.

#### Available Channels

Channel overlap is already forcing us to look at 5.3 GHz and 5.8 GHz equipment for backhauling to our main gateway. Its expensive and only necessary because we don't have enough channels available. We cannot justify spending \$8000 to deploy a remote Access Point that may only service ten customers. Only having three non-overlapping channels in the 2400 MHz range makes it difficult to deploy more than four or five remote access points and back haul them. We don't use omni's and have at least two channels to provide coverage on every cell. More non-overlapping channels would really open up the field for us. We could continue using the inexpensive 2.4 equipment and have the channels necessary for backhauling to more communities without a huge infrastructure cost.

#### Line Of Sight

If we had affordable equipment available in the 700 MHz range, we could get service to nine out of ten customers that contact us instead of the one or two out of ten we see now. There are areas to the North of us that have absolutely no broadband options other than satellite. We haven't deployed in that area because the LOS issues are to much of a problem. Dense trees combined with hills and valleys just won't work with LOS equipment. We would have to deploy numerous Access Points to provide decent coverage to that area. Cost of the deployment as well as the lack of channels makes it very unlikely that we will expand in that direction.

Opening up the unlicensed frequencies was a great start to providing broadband to areas that were under served by the larger providers. It gave us the oportunity to do what we are doing today. If we are going to keep providing service, we need more avenues opened up to us.

Sincerely,

Steve Dietzel

North Central Communications, Inc.